## REMARKS BY THOMAS DUNNE SUPERFUND SEMINAR CHARLOTTES VILLE, VIRGINIA DECEMBER 2, 2004

Good afternoon. I want to thank Jon Cannon and the University of Virginia for inviting me to Charlottesville to walk, as you do, in the shadow of Thomas Jefferson. Jefferson was a man of the world, remembered for his accomplishments as a politician, scientist, and philosopher, but he was also a man of the earth, a prolific gardener who loved shoving his hands into rich, healthy soil. He would be appalled, I believe, at what our industrialized democracy has done to this good earth in the years since his death. And I expect, were he alive, he would already be tinkering with new scientific ideas for making things better

Next year, right about this time, we will commemorate the 25<sup>th</sup> anniversary of Superfund, the law passed to clean up the contamination left behind by industrialization. Superfund gives us a lot to be proud of. According to the preliminary results of a recent study, the benefits of Superfund cleanups may be ten times the cost. That's a pretty good return on investment, especially considering that many of those benefits will continue to accrue for future generations.

Superfund was founded on three underlying principles. First, protect people from the effects of contaminated property; second, make cleanup decisions on the basis of risk; and third, whenever possible, make the parties responsible for contamination clean it up. Those principles still underpin everything we do in Superfund, but some things have changed. Over time, the world in which Superfund operates has changed in ways that the law's authors didn't anticipate. It has changed in ways that people who care about Superfund don't fully understand. It has changed in ways that pose new questions about where Superfund should head in the future. And these new realities, what I call the Superfund facts of life, are clashing with public expectations built up over the past 24 years.

Today I want to begin a national discussion with the American people on the future of

Superfund. We need a frank, open, and non-partisan discussion, for two reasons – first, so our public debates over Superfund, our expectations of Superfund, our evaluations of Superfund, are all premised on the facts of life that EPA experiences on the ground, every day; and second, so we – as a nation – have a common basis for making some tough choices on Superfund's future. Non-partisanship will not be easy, since Superfund's history is riddled with politics.

Exactly 24 years ago today, on December 2, 1980, Senators Robert Stafford of Vermont and Jennings Randolph of West Virginia sent a letter to Representative James Florio encouraging the House of Representatives to pass the Senate Superfund bill. The letter said, in part, "That the bill passed at all is a minor wonder. Only the frailest, moment-to-moment coalition enabled it to be brought to the Senate floor and considered. Indeed, within a matter of hours that fragile coalition began to disintegrate to the point that, in our judgment, it would now be impossible to pass the bill again, even unchanged." I suspect that last comment would ring true today as well.

Despite the fragile coalition, the bill did indeed pass, but the politics didn't end there. Within a few years, EPA's Assistant Administrator in charge of Superfund was sent to prison amid charges related to a cleanup in California. That in turn led to the first and only instance in EPA's history of an Administrator resigning under fire. The charged political atmosphere that attended Superfund's birth and its early years continues to this day. As we look forward to Superfund's second 25 years, which undoubtedly will be different from the first, we need to muster as much dispassionate thoughtfulness as we can.

Here are the Superfund facts of life—first, the purchasing power of Superfund dollars has shrunk over time. For the last 10 years the Superfund budget appropriated by Congress has remained fairly constant, in nominal terms, but in terms of real purchasing power, the dollars available for Superfund cleanups today buy less than they did 10 or 20 years ago. By the way, the lapse of the Superfund tax, and the failure to reinstate it, has nothing to do with this fact of life. Years ago, when the Superfund tax was in full force, that money didn't flow to EPA, it flowed into a Trust Fund whose balance fluctuated over time. Superfund's budget, on the other

hand, comes to us from our annual Congressional appropriations, and the appropriated amounts bear little or no relationship to the balance in the Trust Fund. If the tax were reimposed tomorrow, our budget would not necessarily go up one dime.

Shrinkage in the purchasing power of Superfund dollars is compounded by another fact of life. On average, Superfund sites remaining to be cleaned up are more complex than the sites completed in the past, and they cost more to clean up. Over the history of Superfund to date, we've completed work at 44 megasites, which we define as sites that cost more than 50 million dollars to clean up. Today, we're working on over 90 such sites, not counting contaminated federal facilities. The cost of cleaning up a typical megasite in the past was, on average, \$64 million, but ongoing megasite cleanups are projected to cost \$100 million apiece. The cost of cleaning up smaller sites today may be over twice as much as smaller sites already finished.

Here's a real-world example of what increased complexity can mean. Love Canal is a kind of poster child for the Superfund program. The human health problems uncovered at Love Canal during the late 1970s galvanized public opinion in demanding a federal law to clean up contaminated land. Love Canal was added to the National Priority List of cleanup sites on September 1, 1983. After cleanup was completed in September 1999, EPA and the state of New York conducted an extensive review to see if the cleanup remedies were working as planned. Just a few months ago, 21 years after listing, Love Canal was officially removed from the list of Superfund sites.

Love Canal was no small job. During cleanup of the 70-acre site, almost 40,000 cubic yards of contaminated wastes were removed. More than 260 once-abandoned homes were rehabilitated and resold to new residents. The cost of the cleanup, borne by the private-sector responsible party, amounted to about \$180 million. Love Canal is a success story, the kind of story the authors of Superfund envisioned when they wrote the law.

Now compare that to the Bunker Hill mine and smelter site in Idaho. Like Love Canal,

that site was added to Superfund's list in 1983. Because contamination had spread for miles, EPA divided the site into three different work areas, so site-specific cleanup work could be scheduled and managed better. The first two areas alone encompass 21-square miles, and include eight towns and communities. More than 3,000 residential properties are being cleaned up in those areas, and 400 commercial properties and rights-of-way. So far, almost 2.5 million cubic yards of contaminated materials have been removed. The plan for cleaning up the third area envisions cleanup work for the next 30 years at a cost of perhaps 360 million dollars. That's on top of the more than \$300 million already spent in the first two areas.

It's unlikely the authors of Superfund envisioned a cleanup costing more than \$700 million and lasting several decades, and the end of the Bunker Hill cleanup is not in sight. Predicting the amount of time or money needed to complete cleanup at a huge, expensive site like Bunker Hill is notoriously difficult. It's equally difficult to predict how many more mining sites like that will be added to the Superfund list in years to come, or how many more sediment sites, like New Bedford Harbor in Massachusetts, where we've already spent about \$230 million in public and private cleanup money. But some harsh realities seem crystal clear – the Bunker Hills are going to take a whole lot longer to clean up than the Love Canals, and they're going to take a whole lot more money. The big, expensive sites where responsible parties can't be found will be Superfund's responsibility for many years to come.

Superfund's emergency cleanup program is facing some new facts of life, too.

Occasionally our emergency response teams play a role in highly publicized incidents like the Exxon Valdez oil spill, or oil well fires in Kuwait, but day in and day out, we work below most people's radar screens picking up contaminated barrels dropped in ditches, helping to clean up overturned trucks and train cars loaded with hazardous chemicals, removing the immediate public health risks found at Superfund sites. That hasn't changed, but now EPA's emergency response teams are involved in catastrophic events beyond anything the authors of Superfund envisioned.

On 9/11, our emergency personnel were on their way to New York City before the second plane hit. Then EPA was put in charge of cleaning up the anthrax contamination in the Hart Senate Office Building. When the space shuttle Columbia disintegrated over Texas, EPA's emergency responders were called in. We had over 100 people predeployed in both Boston and New York during this year's political conventions in case of terrorist attack. I don't think it's widely understood how much the mission of our emergency cleanup program has expanded over the past few years. These new responsibilities are stretching our resources thin, and putting huge new pressures on our staff as they train and prepare for a long list of possible emergencies – chemical, radiological, and biological.

I want to mention two more emerging trends that may not be facts of life today, but are troubling because of what they may portend for the future. The first is the extent to which responsible parties will pay for cleanup in the future. Holding responsible parties accountable is one of Superfund's basic principles, a principle we remain committed to absolutely, without equivocation, without reservation, but we're seeing signs that responsible parties are getting harder to come by. For example, the liability of certain parties – like new owners of contaminated property and certain recyclers – has been limited by changes to the law. Some liable parties are seeking bankruptcy protection from tort liability, thus limiting their viability for cleanup costs. Over time, economic downturns have left still other businesses unable to pay their full liability for cleanup, just as they are sometimes unable to pay for pensions or medical insurance for retired workers, and the owners of some potential megasites have disappeared entirely. It's possible, in the years ahead, that the share of sites cleaned up by responsible parties will be lower than it has been in the past.

The other emerging fact of life is the ability of state and local governments to pay for a growing share of traditional cleanup costs. Over time, most states have become willing and skilled partners in Superfund cleanups, particularly at sites where corporate responsible parties are available and cooperative. But states face their own set of challenges in the future.

EPA's Inspector General released a report September 1 that looked at prospective Superfund-related costs in five states. The report said, among other things: "[the five States] appear to be significantly challenged in their ability to meet their required, and impending obligations at current Superfund sites." The report goes on to say that the states may not be able to support impending operation and maintenance responsibilities. In those five states alone, by 2013 long-term O&M costs are projected to be 30 times greater than they are today. Another long-term Superfund cost – enforcing institutional controls at completed sites – are typically borne by state and local governments. These controls, like deed restrictions, ensure that Superfund remedies continue to be effective long after the cleanup is complete.

I'm not sure American communities fully grasp the cost implications of these responsibilities, or how long they could last. As more and more Superfund sites are cleaned up, these responsibilities are sure to grow. What does all this mean for EPA as it tries to manage Superfund today? And what does it mean for Superfund tomorrow?

On a general level, it means the battlefield has changed. In Superfund's early years, we engaged in long debates about "how clean is clean" so we could design sensible, affordable cleanups. Perceptions of unfair liability provisions kept legions of lawyers tied up in court. I still hear stories about how, in some communities, high school auditoriums were used to hold all the lawyers debating liability at a site. Those battles delayed the real work of cleanup for much of the 1980s, and led to a torrent of public criticism of the program.

Thankfully, those days are gone. Now we face a new set of issues driven by the new facts of life. More than ever before, Superfund today is saddled with extraordinarily complex, expensive cleanups that no one else – in the public or private sector – is willing or able to pay for. Today, Superfund is the cleanup program of last resort in this country. When coupled with the decline in Superfund's buying power, that means EPA's management options are severely constrained compared to 10 or 15 years ago. Last year, for example, 52 percent of our cleanup budget was invested in just nine large sites. Almost 20 percent of that same cleanup budget –

about \$50 million – was spent on required work at completed sites. In other words, only about 30 percent of last year's cleanup budget was left to be divided among all but nine of the sites eligible for EPA funding.

This reality drives some tough management decisions. Here's what we do. We fully fund all the ongoing small projects, and then meter out our remaining money to the ongoing big projects and to the eligible new starts that pose the highest health risks. These decisions have two unavoidable downsides. First, cleanup work at the big projects is stretched out, and the overall costs at each project probably go up. Second, it means that some newly eligible sites aren't allocated any cleanup funding that year. For the last three years, we haven't started cleanup at some new sites. If we assume that EPA's budget will remain flat for the foreseeable future, construction funding could be delayed at more and more sites. Within a few years, unfunded cleanup work could total several hundred million dollars.

Because of these painful realities, we need to undertake a broader, more strategic discussion of our future options. We need fresh thinking about how we manage the program, how we fund it, how we work in partnership with other levels of government. We need fresh thinking so our traditional, valued principles can be applied successfully to the realities of the future.

Let me emphasize one thing right up front— I am NOT calling for a bigger Superfund budget. I'm a realist and a manager. As a realist, I'm assuming that the Superfund budget will remain flat, at best, for the next several years. As a manager, I'm looking for the best ways to manage program funding, site cleanups, and public expectations within that budget reality. We need a national dialogue to generate new ideas on management techniques, funding flexibility, program structures — anything and everything that might help a manager use budget resources more effectively. Nor am I calling today for another study of Superfund. Since 2000, no less than 21 evaluations of Superfund have been conducted within and outside EPA, but too many of these evaluations, in my opinion, failed to recognize the disconnect between

expectations and reality, and so were less helpful than hoped.

The most recent major study of Superfund was conducted at EPA's request by a subcommittee of the National Advisory Committee on Policy and Technology. The subcommittee worked hard, and debated the issues honestly and strenuously, but they could not come to agreement on the big, emerging issues facing Superfund, precisely because those issues require us to put aside our preconceptions of Superfund, and our entrenched positions on Superfund, in order to make painful choices.

Today I'm going to throw a handful of ideas on the table. I'm fully aware of the land mines buried in the road to a better Superfund, and I'll probably step on a few today, but what good is a dialogue without sharp debate? First idea: could we raise our current emphasis on site reuse up another notch or two, and tap the economic winners for more of the cleanup costs? We already know that when people see gold at the end of the cleanup rainbow, when they have something to gain economically beyond the reduction in health risks, then cleanups go more smoothly.

At hundreds of brownfield sites every year, private businesses that will benefit economically from a clean site are stepping forward to help with the cleanup. They stand to make money in they end, and so they see cleanup costs as part of their investment. Given the growing funding gap at orphan sites in Superfund, the costs that EPA has to pick up, can we find new sources of cleanup funding related to the economic values to be realized after cleanup? We will still pursue liable, viable parties, but when they can't be found, maybe self-interested parties would be willing to bear some of the load. Maybe we could stimulate their interest with incentives. What might those be, and what tradeoffs would be entailed?

Here's another idea—since Superfund's future appears to be inextricably linked to large, complex, expensive sites like Bunker Hill, would there be value in setting up a separate management system, or a separate fund, for megasite cleanup? Maybe EPA's resource allocation

decisions would be more understandable, and more acceptable, if we managed and reported on megasites differently from the rest of Superfund. Somehow, we have to help the public understand why megasites cost so much to clean up, and how that impacts the rest of the program. Public expectations regarding the pace of cleanup at megasites has to more closely match reality.

And my last idea for the day— would Superfund benefit, and would the public approve, if EPA stopped listing new sites, or didn't begin cleanup at any newly eligible orphan sites, until current work in the pipeline was completed? If EPA allocated larger amounts of cleanup funding each year to fewer sites, then sites would be cleaned up more quickly, and aggregate costs at each would probably be lower. But would people accept the fact that some sites would be put in a holding pattern, maybe for several years, before cleanup work began?

I've offered today just a handful of sketchy ideas, just enough to draw fire and get the ball rolling. None of them may have enough merit to be adopted, but that's not my point today. Our old ways of looking at and talking about Superfund are out of sync with today's realities. Our old ways of managing Superfund may not be well equipped to handle these realities. We need to rethink where we're going, and how we're going to get there. So let's throw all our experiences, all our ideas, on the table, debate them frankly and openly, and look for a better way.

On that note, I'll turn the microphone over to our distinguished panel for their views on the future of Superfund